

FEB 20 2004

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**510 (k) Summary**

(As required by 21 CFR 807.92 and 21 CFR 807.93)

**NAME OF SPONSOR:** DePuy ACE®  
700 Orthopaedic Drive  
Warsaw, Indiana 46581-0988  
Establishment Registration Number: 1818910

**510(K) CONTACT:** Rhonda Myer  
Regulatory Affairs  
Telephone: (574) 371-4944  
Facsimile: (574) 371-4987  
Electronic Mail: Rmyer@dpyus.jnj.com

**DATE PREPARED:** December 12, 2003

**PROPRIETARY NAME:** ACE® Antegrade Retrograde Humeral Nail System

**COMMON NAME:** Intramedullary Nail

**CLASSIFICATION:** Class II Device per 21 CFR 888.3020:  
Intramedullary Fixation Rod

**DEVICE PRODUCT CODE:** 87 HSB

**SUBSTANTIALLY EQUIVALENT DEVICES:** DePuy ACE® AIM Humeral Nail, K934643  
Howmedica Osteonics Corp T2™ Humeral Nail System, K011529

**DEVICE DESCRIPTION:**

The ACE® Antegrade Retrograde (A/R) Humeral Nail System includes an intramedullary nail, cancellous and cortical screws, and end caps and is intended for the fixation of humeral fractures. The nail is available in diameters of 7, 8, and 9 millimeters and lengths of 200-300mm, in 20mm increments. The nail incorporates anterior/posterior and lateral/medial screw holes, distal and proximal bends, a distal locking screw slot, and may be inserted antegrade as well as retrograde.

**INTENDED USE AND INDICATIONS:**

**Intended Use:**

The ACE® A/R Humeral Nail is a single use device intended for fixation of humeral fractures.

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**Indications for Use:**

The ACE<sup>®</sup> A/R Humeral Nail is indicated for open and closed fracture patterns, humeral shaft fractures, fractures of the proximal and distal metaphysis, comminuted fractures of the humerus with small medullary canals, fracture non-unions and mal-unions, pathological fractures, floating elbow.

**BASIS OF SUBSTANTIAL EQUIVALENCE:**

Based on the same intended use, indications for use, design features, materials, and sterilization processes, DePuy ACE<sup>®</sup> believes that the subject Antegrade Retrograde Humeral Nail System is substantially equivalent to the previously cleared DePuy ACE<sup>®</sup> AIM Humeral Nail System (K934643) and the Howmedica Osteonics Corp T2<sup>™</sup> Humeral Nail System (K011529).



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

FEB 20 2004

Ms. Rhonda Myer  
Regulatory Affairs  
DePuy Ace  
700 Orthopaedic Drive  
Warsaw, Indiana 46581-0988

Re: K033878  
Trade/Device Name: DePuy ACE®  
Regulation Number: 21 CFR 888.3020  
Regulation Name: Intramedullary fixation rod  
Regulatory Class: II  
Product Code: HSB  
Dated: December 12, 2003  
Received: December 15, 2003

Dear Ms. Myer :

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

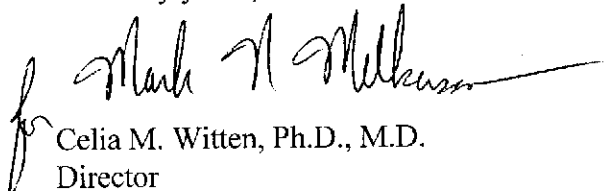
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4659. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten", with a long horizontal flourish extending to the right.

Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**DePuy ACE**

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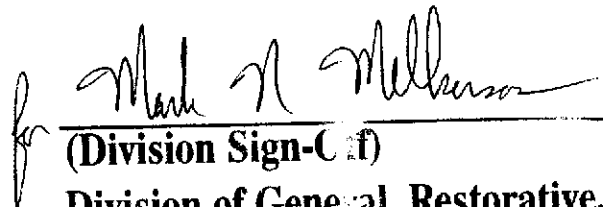
**Indications for Use Statement**

510 (k) Number (if known): K033878

Device Name: **DePuy ACE® Antegrade Retrograde Humeral Nail System**

**Indications for Use:**

The ACE® Antegrade Retrograde Humeral Nail System is indicated for open and closed fracture patterns, humeral shaft fractures, fractures of the proximal and distal metaphysis, comminuted fractures of the humerus with small medullary canals, fracture non-unions and mal-unions, pathological fractures, floating elbow.

  
(Division Sign-Off)

**Division of General, Restorative,  
and Neurological Devices**

510(k) Number K033878

(Please do not write below this line continue on another page if necessary)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use: X OR Over-The-Counter-Use: \_\_\_\_\_